Attachment to
[redacted]9072-68

PFIAB Submission for 30 June 1968

OXCART

1. The 29 December 1966 decision to terminate the OXCART program was re-affirmed on 21 May 1968. Termination of the program slipped from 31 December 1967 to 30 June 1968 to allow the SR-71 sufficient time to assume Southeast Asia reconnaissance vice the OXCART/BLACK SHIELD operation. The A-12 aircraft at Kadena Air Base, Okinawa, were re-deployed to the States in June 1968. OXCART facilities at Kadena were turned over to the USAF for use by the SR-71 detachment.

2. Storage of OXCART aircraft at Palmdale, California, was completed on 21 June 1968. These include two test aircraft, one trainer and five operational aircraft. Installed and ground equipments, with appropriate spares, were retained to support the stored aircraft. Sufficient spare parts and supplies were retained to support a 90 day level of activity for five operational aircraft.

NRO

25X1A

3. Residual OXCART assets common to the SR-71 aircraft are being transferred to that program. OXCART peculiar assets are being stored at [redacted] Excess equipments and supplies have been made available to other NRO programs. See Appendix A for an inventory of OXCART systems being placed in storage.

4. Twenty-five operational missions were flown in the past twelve months. Twenty were flown over North Vietnam, two were primarily targeted against Cambodia, and three were over North Korea. The cameras operated satisfactorily, and good to excellent imagery was obtained. Enemy radar tracking was reported on all but two missions, ranging from brief reflections of the A-12's presence to extended and accurate tracking. Surface to air missiles were launched at the A-12 on three missions, without success. See Appendix B for a summary of the operational missions.

5. The fifth accident in the OXCART program occurred on 4 June 1968 when an aircraft disappeared without trace east of the Phillippines while on a routine functional check flight

NRO

25X1A

following an engine change. Cause of the accident was not determined, although catastrophic engine failure was possible based on analysis of malfunction sensing signals received immediately preceding the aircraft's disappearance. An intensive sea and air search failed to locate the pilot, aircraft or any evidence of the accident.

6. During the course of the OXCART program, 2,850 flights were completed for a total of 4,800 flight hours. There were 1,032 flights (275 during the past year) which reached or exceeded speeds of Mach 3.0 for a total of 675 flight hours (220 during the past year) at or above Mach 3.0. The maximum speed achieved [redacted] The maximum altitude achieved was 90,000 feet. The longest single flight was 7:40 hours. On another flight, 3:50 hours were spent at or above Mach 3.0. The longest single sustained flight time at or above Mach 3.2 was 1:14 hours. In the past three years, Mach 3.0 flights were made on a routine daily basis. 25X1D

25X1D

NRO

Appendix A to
[redacted] 9072-68

25X1A

OXCART Systems Inventory

(All OXCART systems are scheduled to be packaged and stored by 31 July 1968).

System	Quantity
Sensors	
Type I (Perkin-Elmer) Camera	7
Type II (Eastman Kodak) Camera	2
Type IV (Hycon) Camera	3
25X1D [redacted]	
EWS	
25X1D [redacted]	6
	5
	7
	10
	6
	3
Miscellaneous	
Inertial Navigation System	1 per aircraft
Stability Augmentation System	1 per aircraft
25X1A [redacted]	1 per aircraft
Life Support	1 per aircraft
Engines (YJ and YJ-1)	49

NRO

[redacted]

25X1A

NRO

Appendix B to
[redacted] 9072-68

25X1A

BLACKSHIELD OPERATIONAL SUMMARY
(30 June 1967-30 June 1968)

(All missions were flown over North Vietnam except as noted. The Type I (Perkin-Elmer) camera was used on all missions. The Mach numbers and altitudes shown below represent the maximum attained during the missions)

1. BX-6708, 13 July 1967. Mission was flown at Mach 3.15 and 82,100 feet for a duration of 3:40 hours. Imagery quality: Good.

2. BX-6709, 19 July 1967. Mission was flown at Mach 3.17 and 82,000 feet for a duration of 4:58 hours. Imagery quality: Excellent.

3. BX-6710, 20 July 1967. Mission was flown at Mach 3.16 and 82,450 feet for a duration of 4:55 hours. Imagery quality: Good, despite haze problem.

4. BX-6716, 21 August 1967. Mission was flown at Mach 3.2 and 80,000 feet for a duration of 3:55 hours. Imagery quality: Good to Excellent.

5. BX-6718, 31 August 1967. Mission was flown at Mach 3.20 and 81,000 feet for a duration of 5:12 hours. Imagery quality: Good until camera malfunctioned.

6. BX-6722, 16 September 1967. Mission was flown at Mach 3.15 and 80,000 feet for a duration of 4:01 hours. Imagery quality: Good.

7. BX-6723, 17 September 1967. Mission was flown at Mach 3.16 and 81,000 feet for a duration of 4:00 hours. Imagery quality: Excellent.

8. BX-6725, 4 October 1967. Mission was flown at Mach 3.14 and 81,000 feet for a duration of 4:09 hours. Imagery quality: Excellent.

9. BX-6727, 6 October 1967. Mission was flown at Mach 3.19 and 81,000 feet for a duration of 2:20 hours. Imagery quality: Good. Mission was prematurely terminated due to a faulty oil pressure indicator.

NRO

25X1A

HANDLE VIA [redacted]
CONTROL SYSTEM

NRO

25X1A

10. BX-6728, 15 October 1967. Mission was flown at Mach 3.19 and 81,000 feet for a duration of 3:41 hours. Imagery quality: Good.

11. BX-6729, 18 October 1967. Mission was flown at Mach [redacted] and 81,000 feet for a duration of 4:01 hours. Imagery quality: Good.

25X1D

12. BX-6732, 28 October 1967. Mission was flown at Mach 3.15 and 83,500 feet for a duration of 3:49 hours. Imagery quality: Good.

13. BX-6733, 29 October 1967. Mission was flown at Mach [redacted] and 82,000 feet for a duration of 3:56 hours. Imagery quality: Good.

25X1D

14. BX-6734, 30 October 1967. Mission was flown at Mach 3.20 and 85,000 feet for a duration of 3:44 hours. Imagery quality: Good.

15. BX-6737, 8 December 1967 (Cambodia). Mission was flown at Mach 3.20 and 82,500 feet for a duration of 3:59 hours. Imagery quality: Good.

16. BX-6738, 10 December 1967 (Cambodia). Mission was flown at Mach 3.17 and 81,000 feet for a duration of 3:51 hours. Imagery quality: Good.

17. BX-6739, 15 December 1967. Mission was flown at Mach 3.20 and 86,000 feet for a duration of 4:09 hours. Imagery quality: Good.

18. BX-6740, 16 December 1967. Mission was flown at Mach 3.20 and 86,200 feet for a duration of 3:56 hours. Imagery quality: Good.

19. BX-6842, 4 January 1968. Mission was flown at Mach 3.20 and 85,100 feet for a duration of 3:57 hours. Imagery quality: Good.

20. BX-6843, 5 January 1968. Mission was flown at Mach [redacted] and 86,000 feet for a duration of 4:09 hours. Imagery quality: Satisfactory (haze and cloud shadow).

25X1D

NRO

HANDLE VIA [redacted]
CONTROL SYSTEM

25X1A

NRO

25X1A

21. BX-6847, 26 January 1968 (North Korea). Mission was flown at Mach 3.20 and 83,500 feet for a duration of 4:00 hours. Imagery quality: Good.

22. BX-6851, 16 February 1968. Mission was flown at Mach 3.20 and 85,600 feet for a duration of 3:54 hours. Imagery quality: Good (considerable cloud cover).

23. BX-6853, 19 February 1968 (North Korea). Mission was flown at Mach 3.20 and 83,500 feet for a duration of 3:39 hours. Imagery quality: Good.

24. BX-6856, 8 March 1968. Mission was flown at Mach 3.20 and 85,500 feet for a duration of 4:01 hours. Imagery quality: Good.

25. BX-6858, 6 May 1968 (North Korea). Mission was flown at Mach 3.20 and 84,700 feet for a duration of 3:30 hours. Imagery quality: Fair due to haze and scattered clouds.

NRO

25X1A

NRO
25X1A

Attachment to
[redacted]9072-68

PFIAB Submission for 30 June 1968

IDEALIST

1. U-2C Development Summary

a. During Fiscal Year 1968, programs of continued product improvement were conducted on cameras, sensors, electronic countermeasures equipment, propulsion system and airframe on the U-2 aircraft.

b. Following is a list of some of the tests and development programs which were conducted on U-2 aircraft during Fiscal Year 1968:

25X1A

(1) [redacted]
(2)
(3)
(4)
(5)
(6)
(7)
(8)
(9)
(10)
(11)
(12)
(13)

NRO 25X1A

HANDLE VIA [redacted]
CONTROL SYSTEM

NRO
25X1A

2. Operational Summary

a. A total of twelve (12) U-2 covert reconnaissance missions were flown during the fiscal year, ten photo, one ELINT and one [redacted]. These operations were conducted from [redacted] (8) and [redacted] 25X1A
25X1D
25X1A
25X1A
[redacted] Photographic coverage of 220 COMIREX targets and 172 additional targets was obtained on the photo missions.

b. There was one operational loss of aircraft and pilot on mission C297C southwest of Shanghai, China, on 8 September 1967.

c. At present, there are 5 U-2C/G aircraft and 3 U-2R aircraft in the Agency inventory, [redacted] 25X1C
25X1C

3. U-2R Development Summary

a. The first U-2R was delivered in August 1967, and first flight occurred on 28 August 1967, as scheduled. A total of six aircraft have been delivered through 30 June 1968, the first two of which have been engaged in development flight test. Aircraft 3 through 6 have been accepted by the operating detachment, and have been utilized for pilot training and proficiency flying. U-2R fleet operational ready status will be achieved when the aircraft have been modified to the latest EWS configuration. Completion of modification is scheduled by January 1969.

b. Basic U-2R flight test is 90% complete. Demonstrated U-2R performance has been consistent with design specification performance. During development phase problems have occurred with aircraft air conditioning, engine oil cooling, ejector assymetric thrust, fuel feed system, tail vibration and oxygen pressure. Acceptable fixes have been obtained or are under investigation for each of these problems. Through 30 June 1968 a total of 570 hours were flown by the U-2R, of which 330 hours were flight test and 240 hours were detachment flying.

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Attachment to
[redacted]9072-68

25X1A

PFIAB Submission for 30 June 1968

OXCART

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NRO

25X1A

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NRO

Appendix A to
[redacted]9072-68

25X1A

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[redacted]	6
	5
	7
	10
	6
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Stability Augmentation System	1 per aircraft
25X1A [redacted]	1 per aircraft
Life Support	1 per aircraft
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NRO

25X1A

NRO
25X1A

Appendix B to
[redacted]9072-68

BLACKSHIELD OPERATIONAL SUMMARY
(30 June 1967-30 June 1968)

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NRO
25X1A

HANDLE VIA [redacted]
CONTROL SYSTEM

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12. BX-6732, 28 October 1967. Mission was flown at Mach 3.15 and 83,500 feet for a duration of 3:49 hours. Imagery quality: Good.

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18. BX-6740, 16 December 1967. Mission was flown at Mach 3.20 and 86,200 feet for a duration of 3:56 hours. Imagery quality: Good.

19. BX-6842, 4 January 1968. Mission was flown at Mach 3.20 and 85,100 feet for a duration of 3:57 hours. Imagery quality: Good.

20. BX-6843, 5 January 1968. Mission was flown at Mach [redacted] and 86,000 feet for a duration of 4:09 hours. Imagery quality: Satisfactory (haze and cloud shadow). 25X1D NRO

HANDLE VIA [redacted] CONTROL SYSTEM 25X1A

NRO

25X1A

21. BX-6847, 26 January 1968 (North Korea). Mission was flown at Mach 3.20 and 83,500 feet for a duration of 4:00 hours. Imagery quality: Good.

22. BX-6851, 16 February 1968. Mission was flown at Mach 3.20 and 85,600 feet for a duration of 3:54 hours. Imagery quality: Good (considerable cloud cover).

23. BX-6853, 19 February 1968 (North Korea). Mission was flown at Mach 3.20 and 83,500 feet for a duration of 3:39 hours. Imagery quality: Good.

24. BX-6856, 8 March 1968. Mission was flown at Mach 3.20 and 85,500 feet for a duration of 4:01 hours. Imagery quality: Good.

25. BX-6858, 6 May 1968 (North Korea). Mission was flown at Mach 3.20 and 84,700 feet for a duration of 3:30 hours. Imagery quality: Fair due to haze and scattered clouds.

NRO

25X1A